

Application No. 10/810,887
Response dated January 30, 2006
Response to Office Action Dated November 30, 2005

AMENDMENTS TO THE CLAIMS

The following is a complete list of all claims in this application (including withdrawn claims). Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently Amended), (Cancelled), (Withdrawn), (New), (Previously Presented), or (Not Entered). Please AMEND claims 1, 6, 12, and 18 in accordance with the following:

What is claimed is:

1. (Currently Amended) A liquid crystal display, comprising;
an upper substrate with a common electrode thereon;
a lower substrate with a pixel electrode thereon;
a liquid crystal layer injected between the upper substrate and the lower substrate; and
spacers positioned between the upper substrate and the lower substrate and within a
pixel region, the spacers in the pixel region determining a gap between the upper and lower
substrates;
wherein liquid crystal molecules on the both substrates are aligned antiparallel to each
other, and the color of the spacers is black.

2. (Original) A liquid crystal display of claim 1,
wherein the liquid crystal display further comprises a compensation film and a
polarizer.

3. (Original) A liquid crystal display of claim 2,
wherein a slow axis of the compensation film is not parallel to a transmittance axis of

Application No. 10/810,887
Response dated January 30, 2006
Response to Office Action Dated November 30, 2005

the polarizer.

4. (Original) A liquid crystal display of claim 3,
wherein the angle between the slow axis of the compensation film and the
transmittance axis of the polarizer is about 45 degree.

5. (Original) A liquid crystal display of claim 1,
wherein the spacers are ball type or column type.

6. (Currently amended) A liquid crystal display, comprising;
an upper substrate with a common electrode thereon;
a lower substrate with a pixel electrode thereon;
a liquid crystal layer injected between the upper substrate and the lower substrate; and
spacers positioned between the upper substrate and the lower substrate and within a
pixel region, the spacers in the pixel region determining a gap between the upper and lower
substrates;
wherein the alignment of the liquid crystal layer is OCB type, and the spacers are
black.

7. (Original) A liquid crystal display of claim 6,
wherein the liquid crystal display further comprises a compensation film and a
polarizer.

8. (Previously Presented) A liquid crystal display of claim 7,
wherein a slow axis of the compensation film is not parallel to a transmittance axis of

Application No. 10/810,887
Response dated January 30, 2006
Response to Office Action Dated November 30, 2005

the polarizer.

9. (Previously Presented) A liquid crystal display of claim 8,
wherein an angle between the slow axis of the compensation film and the
transmittance axis of the polarizer is about 45 degrees.

10. (Original) A liquid crystal display of claim 6,
wherein the spacers are ball type or column type.

11. (Original) A liquid crystal display of claim 7,
wherein the compensation film has a smaller dispersion of birefringence than the
liquid crystal layer.

12. (Currently Amended) A liquid crystal display, comprising;
an upper substrate with a common electrode and a color filter thereon;
a lower substrate with a pixel electrode, and an array of thin film transistors;
a liquid crystal layer injected between the upper substrate and the lower substrate; and
spacers positioned between the upper substrate and the lower substrate and within a
pixel region, the spacers in the pixel region determining a gap between the upper and lower
substrates;
wherein light transmittance of the spacers is lower than 3 % and number of the
spacers is less than 90 in one square millimeter.

13. (Original) A liquid crystal display of claim 12,
wherein the liquid crystal display further comprises a compensation film and a

Application No. 10/810,887
Response dated January 30, 2006
Response to Office Action Dated November 30, 2005

polarizer.

14. (Original) A liquid crystal display of claim 13,
wherein a slow axis of the compensation film is not parallel to a transmittance axis of
the polarizer.

15. (Original) A liquid crystal display of claim 14,
wherein an angle between the slow axis of the compensation film and the
transmittance axis of the polarizer is about 45 degree.

16. (Original) A liquid crystal display of claim 12,
wherein the spacers are ball type or column type.

17. (Original) A liquid crystal display of claim 12,
wherein the compensation film has a smaller dispersion of the birefringence than the
liquid crystal layer.

18. (Currently Amended) A liquid crystal display, comprising;
an upper substrate with a common electrode thereon;
a lower substrate with a pixel electrode thereon;
a liquid crystal layer injected between the upper substrate and the lower substrate; and
spacers positioned between the upper substrate and the lower substrate and within a
pixel region, the spacers in the pixel region determining a gap between the upper and lower
substrates;
wherein liquid crystal molecules of the liquid crystal layer on both the upper substrate

Application No. 10/810,887
Response dated January 30, 2006
Response to Office Action Dated November 30, 2005

and the lower substrate are aligned antiparallel to each other, and number of the spacers is less than 90 in one square millimeter.

19. (Original) A liquid crystal display of claim 18,
wherein the liquid crystal display further comprises a compensation film and a polarizer.

20. (Original) A liquid crystal display of claim 19,
wherein a slow axis of the compensation film is not parallel to a transmittance axis of the polarizer.

21. (Original) A liquid crystal display of claim 20,
wherein an angle between the slow axis of the compensation film and the transmittance axis of the polarizer is about 45 degrees.

22. (Original) A liquid crystal display of claim 18,
wherein the spacers are ball type or column type.

23. (Original) A liquid crystal display of claim 18,
wherein the compensation film has a smaller dispersion of the birefringence than the liquid crystal layer.